Simplicity

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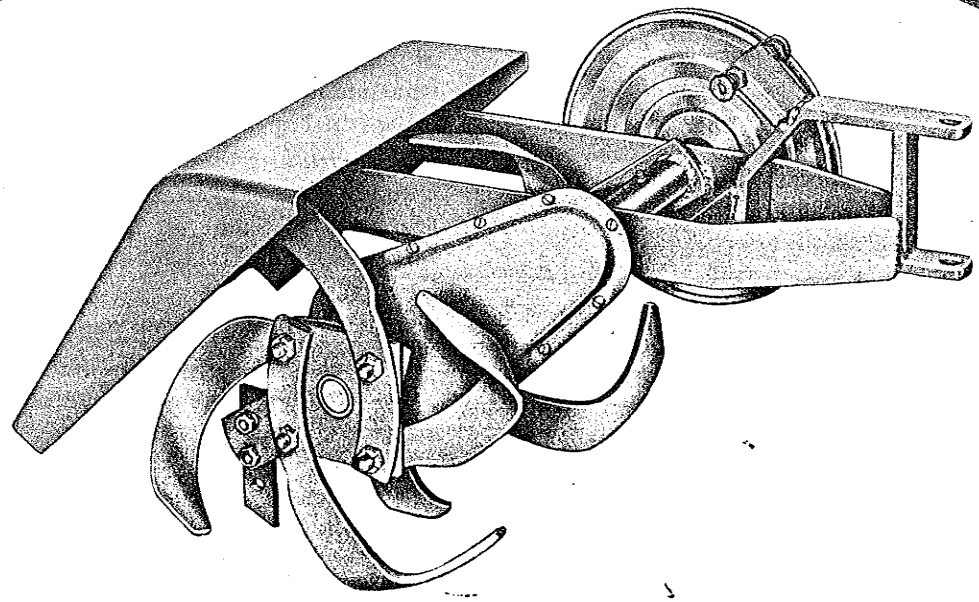
12" STANDARD ROTARY TILLER ATTACHMENT

ARTICLE No. 990069

INSTRUCTIONS AND PARTS LIST



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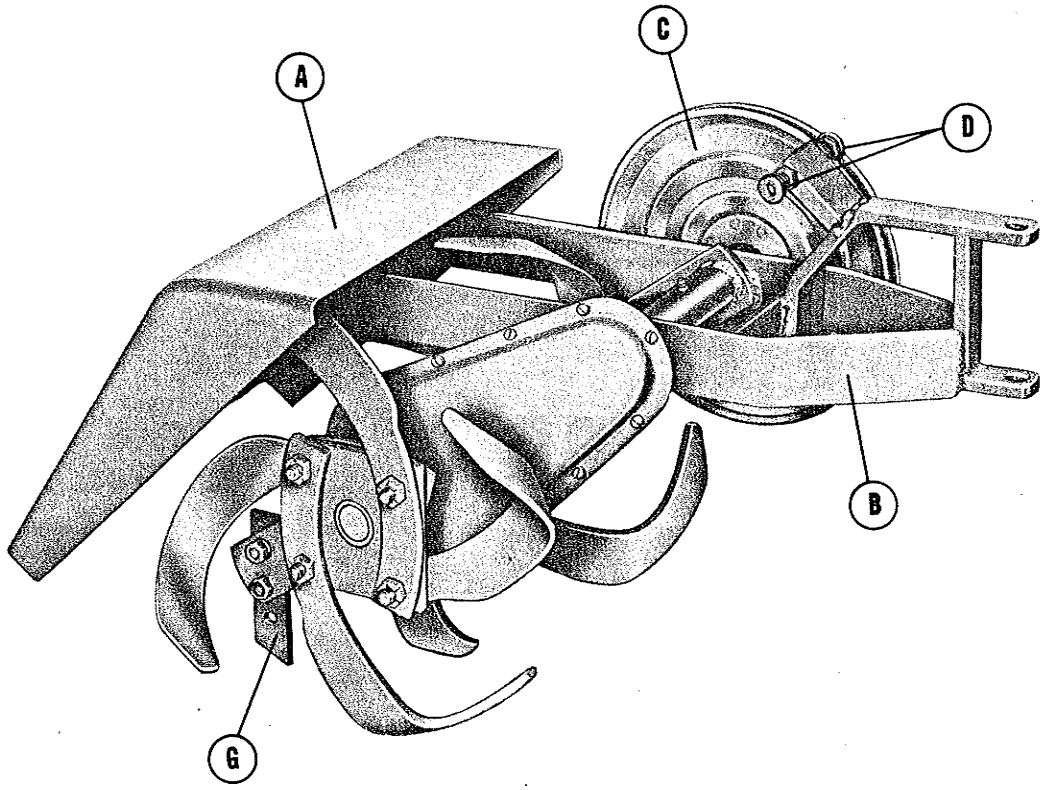


Fig. 1

12" STANDARD ROTARY TILLER ATTACHMENT

PACKING LIST

The 12" standard rotary tiller attachment is shipped complete in a carton.

IMPORTANT—Before setting up tiller, read the instructions carefully. A thorough understanding of the instructions simplifies assembly and operation.

ASSEMBLY FOR USE WITH A, LB, LC, FB, AND FC TRACTORS (Fig. 1)

1. Bolt the shield (A) to the frame (B) with the two bolts provided, making sure lock washers and nuts are located on outside of shield.
2. Place drive pulley washer and key on shaft, then install tiller drive sheave (C) over key with hub to outside when tiller is used with Model A, LB, LC tractor, hub to inside when used with Model FB and FC tractor. Tighten set screw.
3. To permit ease of attaching tiller to tractor, spread bolts (D) should be turned ½ inch into hitch of tiller frame.
4. Attach tiller to tractor with hitch pin.

NOTE: *Remove tractor drive belt. For Model A, LB, LC tractor, loosen engine pulley set screw, remove engine pulley, turn it around and replace with small groove to INSIDE as shown in Fig. 3. DO NOT change position of engine pulley of Model FB and FC tractor.*

5. Installing tiller drive belt on Model A, LC, LB tractor: Refer to Fig. 3. Place belt (E) on inside groove of engine pulley over idler pulley and transmission pulley and tiller drive sheave as shown.
6. Installing tiller drive belt on Model FC and FB tractor: Please refer to Fig. 2. Place belt (E) on middle groove of engine pulley over idler pulley, large step of transmission pulley, and over tiller drive sheave as shown in Fig. 2.
7. Make visual alignment of tiller belt and tighten spread bolts (D) against tractor frame locking with jam nuts. Tighten all set screws. **THIS ADJUSTMENT IS VERY IMPORTANT AS IT MINIMIZES BELT WEAR.**

OPERATION OF 12" TILLER ATTACHMENT ON MODELS A, LB, LC, FB AND FC TRACTORS

1. Before starting engine be sure clutch lever (F) is in forward or declutched position.
2. After starting engine, shift FB and FC tractor to LOW speed, (NOTE: Pulley arrangement on Model LB and LC tractor as earlier described is set at LOW speed), and then engage tractor clutch (F) to operate both tractor and tiller.
3. The drag (G) Fig. 1 provides "hold back" allowing tines to penetrate the soil thoroughly. It is properly adjusted at the factory for most soils, but further adjustment may be necessary for your particular soil condition.

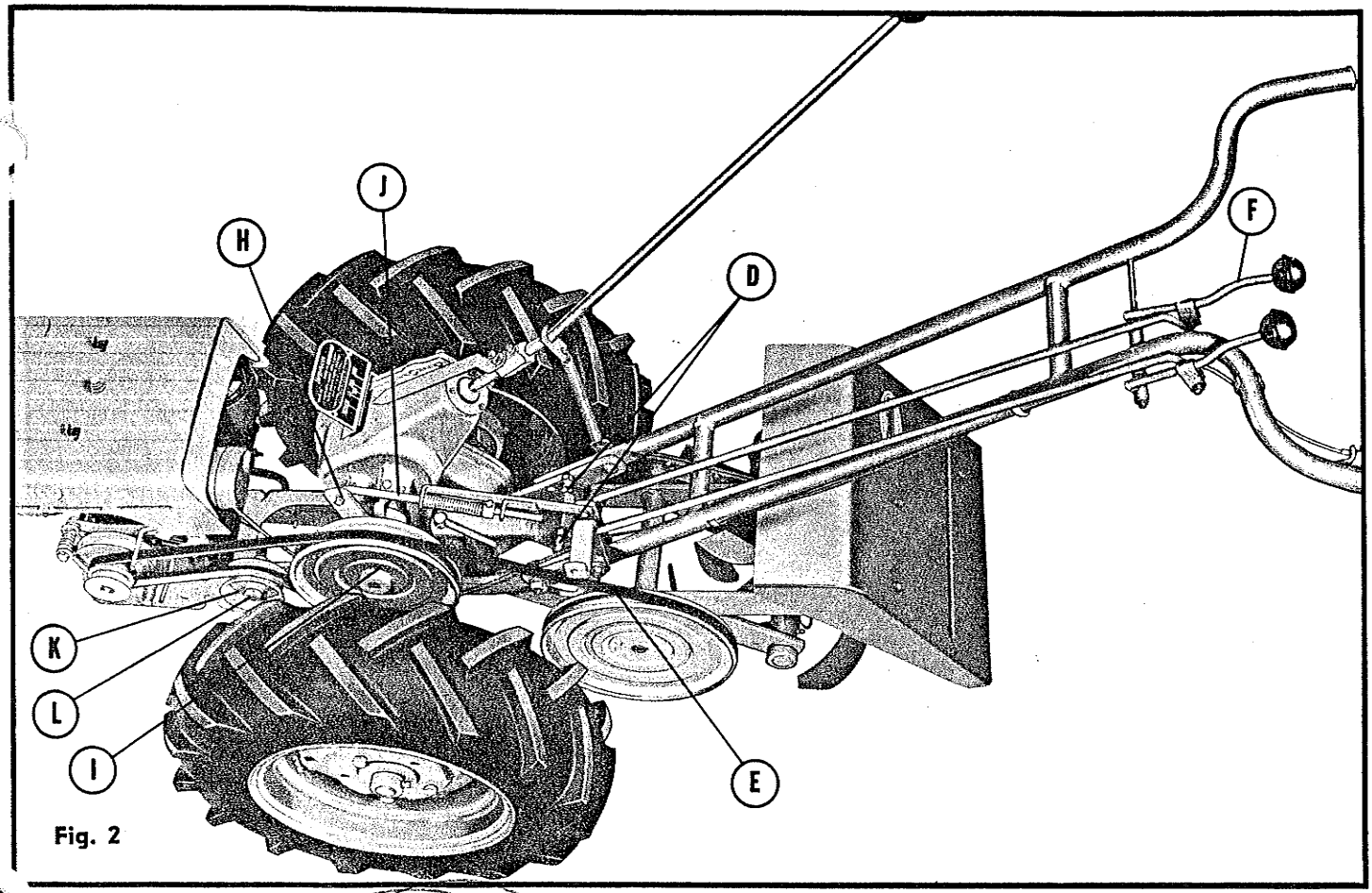


Fig. 2

ASSEMBLY FOR USE WITH F AND FA TRACTORS REQUIRES CONVERSION KIT 990077

1. Bolt the shield (A) to the frame (B) with the two bolts provided making sure lock washers and nuts are located on outside of shield.
2. Place drive pulley washer and key on shaft, then install tiller drive sheave (C) over key with hub to inside. Tighten set screw.
3. Please refer to Fig. 2. Remove transmission pulley and idler lever assembly and replace with idler assembly (H) and transmission pulley (I) which are supplied with 990077 Conversion Kit as shown (Fig. A). When removing idler lever assembly, remove cotter pin which holds lower idler clutch rod (J), and re-insert cotter pin when new idler lever assembly is installed. Idler pulley (K) should be transferred to new idler lever assembly using the idler pulley pin (L) furnished with the 990077 Conversion Kit. Be sure to put spacer washer under idler pulley pin nut and insert grease fitting into idler pulley pin.
4. To permit ease of attaching tiller to tractor, spread bolts (D) should be turned ½ inch into hitch of trailer frame.
5. Attach tiller to tractor with hitch pin.

   NOTE: *Remove tractor drive belt.*
6. Place belt (E) on middle groove of engine pulley, over idler pulley, large step of transmission pulley, and over tiller drive sheave as shown in Fig. 2.
7. Make visual alignment of tiller belt and tighten spread bolts (D) against tractor frame locking with jam nuts. Tighten set screws. **THIS ADJUSTMENT IS VERY IMPORTANT AS IT MINIMIZES BELT WEAR.**

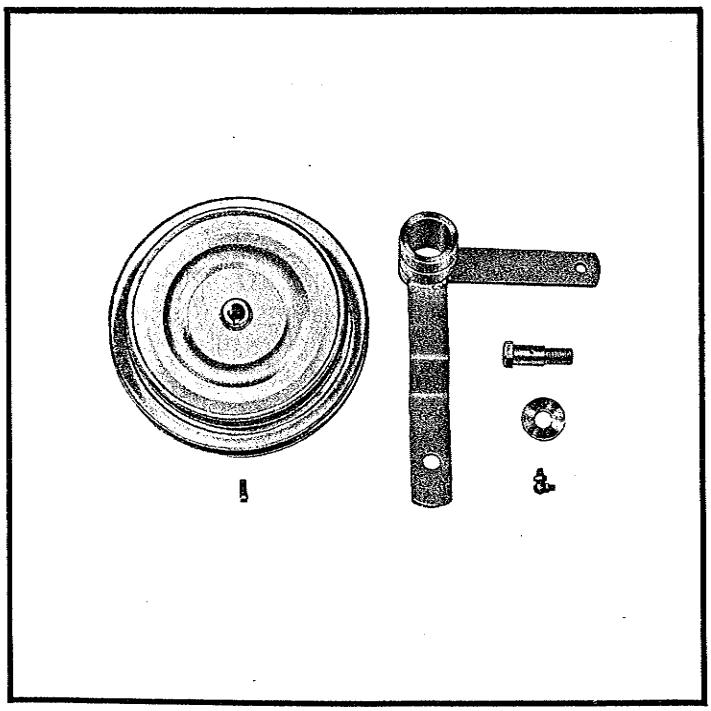


Fig. A — **990077 Conversion Kit**

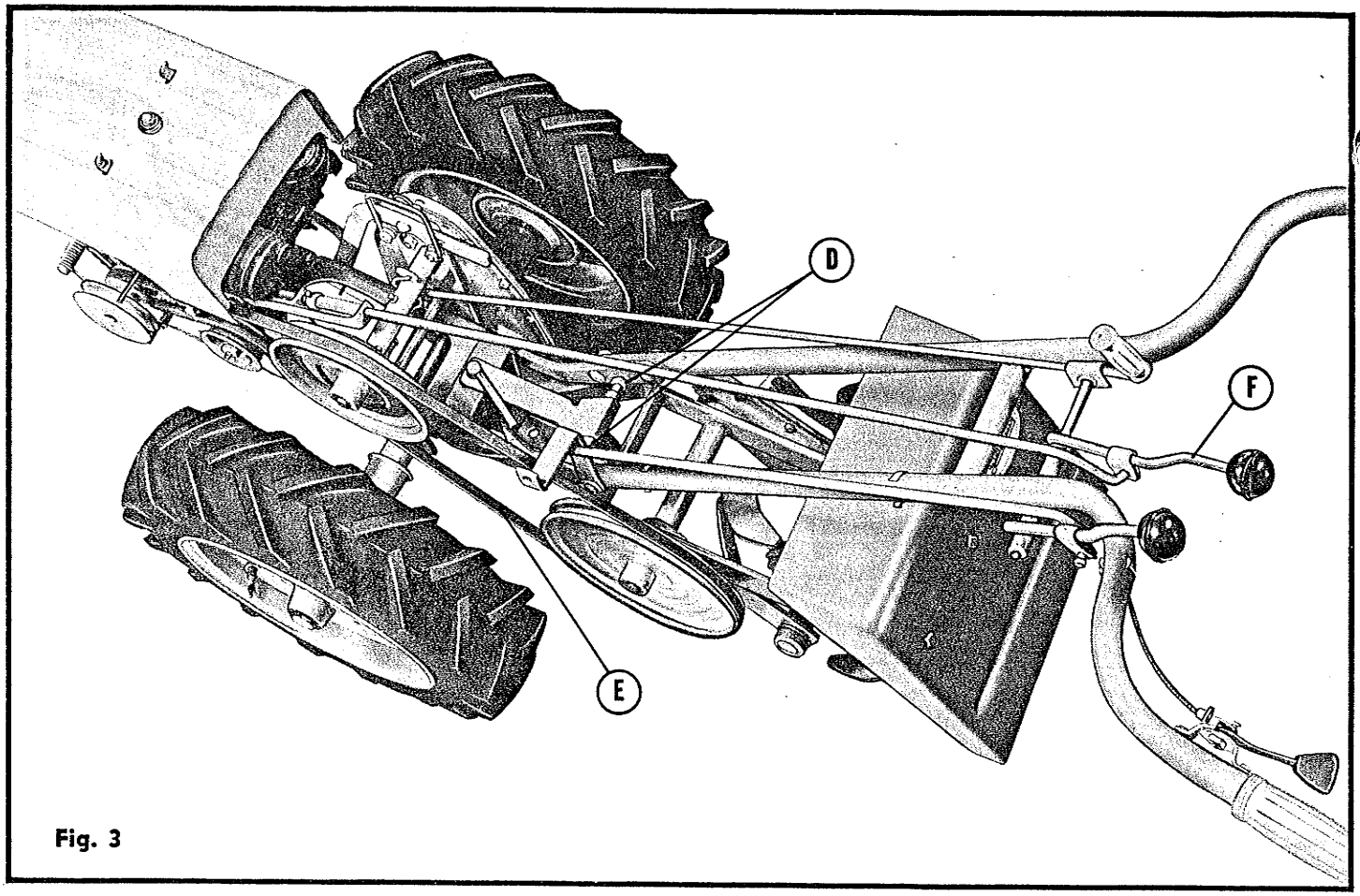


Fig. 3

OPERATION OF 12" TILLER ATTACHMENT ON MODELS F AND FA TRACTORS

1. Before starting engine be sure clutch lever (F) is in forward or declutched position.
2. After starting engine, shift tractor to LOW speed, then engage tractor clutch (F) to operate both tractor and tiller.
3. The drag (G Fig. 1) provides "hold back" allowing tines to penetrate the soil thoroughly. It is properly adjusted at the factory for most soils, but further adjustment may be necessary for your particular soil condition.

ASSEMBLY FOR USE WITH L, L-1, LA M AND M-1 TRACTORS REQUIRES CONVERSION KIT 990078

The tiller and also each of the above tractor models will require slight modification before tiller is ready for use. The 990078 Conversion Kit (Fig. B) contains all necessary parts to make this modification.

Fig. 1 and also inset

1. Bolt the shield (A) to the frame (B) with the two bolts provided making sure lockwashers and nuts are located on outside of shield.
2. Place idler lever assembly (M) on tiller drive shaft with idler pulley to outside. Place drive pulley spacer washer on shaft next to idler lever assembly and install key on shaft.
3. Install tiller drive sheave (C) over key on drive shaft with hub to inside. Tighten set screw.
4. To permit ease of attaching tiller to tractor, spread bolts (D) should be turned ½ inch into hitch of tiller frame. NOTE: The spread bolts in the tiller must be replaced with the spread bolts supplied with the 990078 Conversion Kit when tiller is used with Model M or M-1 and L or L-1 tractors. Be sure the shorter of the two bolts is placed in the hole of tiller frame assembly nearest lever quadrant. Attach tiller to tractor with hitch pin.

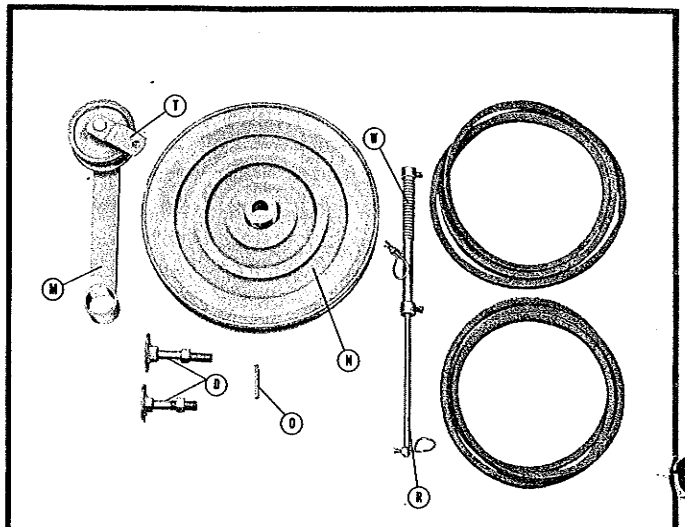


Fig. B 990078 Conversion Kit

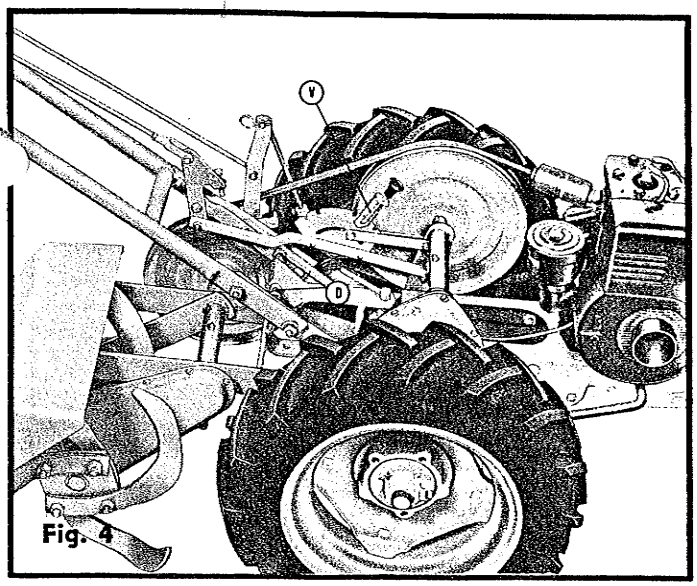


Fig. 4

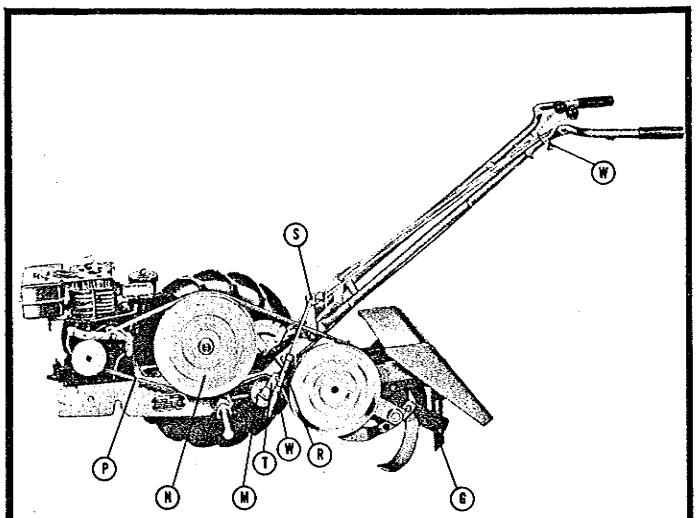


Fig. 5

5. Remove tractor transmission pulley and key, and replace with transmission pulley (N) and key (O) supplied with the 990078 Conversion Kit. Be sure hub of pulley is to outside.
6. With tractor drive belt removed, loosen engine pulley set screw, remove engine pulley, turn it around, and replace with small groove to inside as shown in Fig. 5.
7. Place belt (P) on inside groove of engine pulley, over transmission pulley, over idler pulley and tiller drive sheave as shown in Fig. 5. Use the 78 inch belt for L, L-1, and LA tractors and 73 inch belt for M and M-1 tractors.
8. Attach lower idler clutch rod assembly (R) to lower idler lever (S) and to lever bracket (T) as shown in Fig. 5.
9. Make visual alignment of tiller belt and tighten spread bolts (D Fig. 4) against tractor frame, locking with jam nuts. Tighten all set screws. **THIS ADJUSTMENT IS VERY IMPORTANT AS IT MINIMIZES BELT WEAR.**
10. Adjust belt tension on spring (W) with set collars. To avoid damaging belt use minimum tension required to drive the tiller.

OPERATION OF 12" TILLER ATTACHMENT WITH MODELS L, L-1, LA, M, AND M-1 TRACTORS

1. Locate plunger lever (V) Fig. 4 in (2nd notch) from front of lever quadrant.
2. After tiller is mounted to tractor, the *LEFT* clutch lever (W) Fig. 5 will operate both the tiller and the tractor. Before starting engine be sure *LEFT* clutch lever (W) is in forward or declutched position.
3. The drag (G) provides "hold back" allowing tines to penetrate the soil thoroughly. It is properly adjusted at the factory for most soils, but further adjustment may be necessary for your particular soil condition.

LUBRICATION

There are three high pressure grease fittings on the tiller attachment, one on the drive shaft, two on the tine shaft. Grease every 6 to 8 hours of operation. Use a general purpose semi-solid grease in the grease gun supplied with your tractor. Occasionally flush bearings with sufficient grease to push out all dirt that may have washed into bearings. The gear and chain housing is packed with lubricant and sealed at the factory.

GENERAL INFORMATION

CAUTION

When necessary to make adjustments to tractor or tiller attachment be sure engine is shut off.

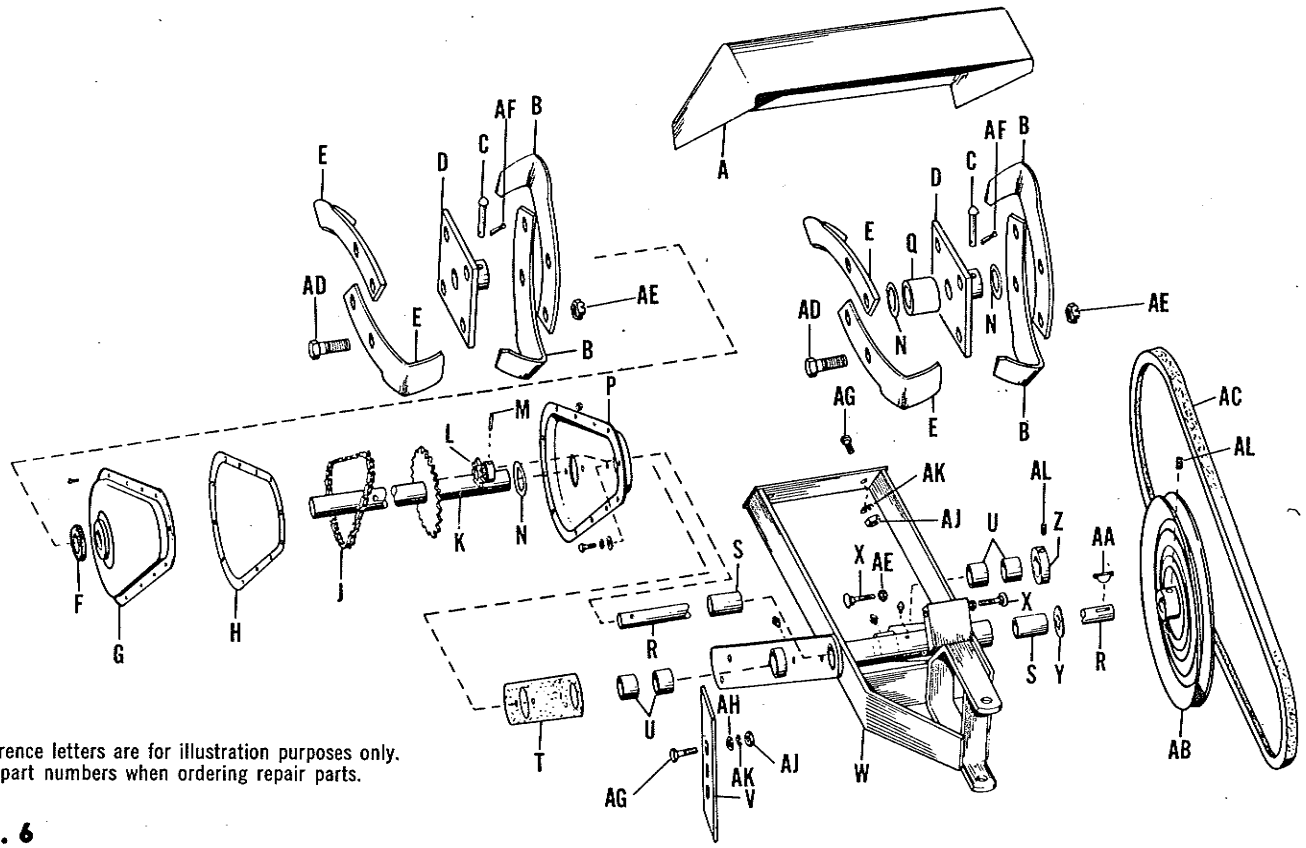
When operating your tiller attachment for the first time, we suggest you try it for a short time to get the "feel". You will want to find the most comfortable handle position and the engine speed best suited to your soil condition. You will soon find the correct pressure to apply to the tractor handles. Pushing down on the handles causes the tines to dig deeper — a slight lift on the handles causes more shallow tilling.

Do not attempt to till when the soil is very wet as this may cause lumps which are difficult to work up. If the soil is extremely hard and dry you may find it desirable to cross-till to obtain the depth you want. On the first pass, till across the plot, and on the second pass, till in the direction in which the rows will run.

SPECIAL IMPORTANT NOTICE

When the 12" tiller attachment is used on Models F, FA, or FB and FC tractors, be sure to follow the instructions below when re-installing the transmission pulley.

Shift the gear shift lever to REVERSE and hold in REVERSE firmly while replacing pulley on shaft. Place pulley as close as possible to gear housing before tightening set screw. This will prevent any play in the shaft and will keep gears in full mesh.



Reference letters are for illustration purposes only.
Use part numbers when ordering repair parts.

Fig. 6

12" ROTARY TILLER REPAIR PARTS

Order by Part Number →

Ref. Letter	Description	Part No.	Shipping Wt. Lbs.	Shipping Wt. Oz.
A	Shield	119014	10	
B	R.H. Tine Blade	R-B2 8152002	1	14
C	Pin - Tine Plate Assembly	118053		6
D	Tine Plate Assembly	119025	3	6
E	L.H. Tine Blade	~~R-B1~~ 8152001	1	14
F	Seal	119034		4
G	Guard Assembly	119031	4	10
H	Guard Gasket	119030		6
J	Drive Chain Individual Link PT.#50	119028	4	8
K	Tine Shaft Assembly	119020	8	8
L	Drive Sprocket	119019	3	8
M	Roll Pin (two pins assembled)	~~114052~~ 1030034		5
N	Washer	SS-CA14 8281014		4
P	Chain Guard, Half	119029	3	
Q	Spacer	119024		10
R	Drive Shaft	119015	2	4
S	Drive Shaft Bearing	119016		8
T	Frame Gasket	119042		4
U	Tine Shaft Bearing	119023		8
V	Drag	119013	1	4
W	Frame Assembly	119002	32	
X	Screw Assembly - Adj.	119046		10
Y	Drive Pulley Washer	119018		4
Z	Collar	D-A28 8021028		8
AA	Hi-Pro Key, H. P-706	114053		5
AB	Drive Sheave	119017	3	6
AC	"V" Drive Belt 76"	119035	3	
AD	7/16"-20 NF x ¾" LG Cap Screw	706009		*
AE	7/16"-20 NF Nut Hex Full	717009		*
AF	Spring Clip	~~S1~~-A45A 8161045		*
AG	⅜"-16 NC x 1" LG Cap Screw Hex Hd.	705005		*
AH	⅜" Washer Plain	719001		*
AJ	⅜"-16 NC Nut Full Hex	717003		*
AK	5/16 Lock Washer	720001		*
AL	5/16"-18 NC x ⅜" Lg. Set Screw	713503		*

** Purchase Locally*